

Written and Programming Final

SI539 - Charles Severance

Written Final Overview

- Friday April 18, 9:30 - 12:00
- Closed Book - Two Pages of Notes
- Question Types
 - Short Answer - Conceptual
 - What would this code do?
 - “Fix broken code” or add “what is missing”
- Focus on Lecture Notes
- No Writing Ruby code sequences - only very simple HTML sequences

Cumulative?

- Yes - by definition
- Focus on second half material

Lloyd: Chapter 4

- Understand the technical detail of CSS lecture and Chapter 4
- Understand markup mechanics and skinning at a high level
- Box Model

Ajax

- Understand how the request/response cycle is different in Ajax
- Understand how we can update elements of a HTML document while the browser is viewing a page - I am interested in concepts here
- Be able to look at a screen shot of a UI and tell if it is using Ajax.
- Be able to talk about some issues that designers face when deciding when, if and how much to use Ajax in their web sites

Ajax

- Do not worry about setters or getters
- Do not worry about any helper syntax for Ajax

Data Modeling

- Be able to read Entity-Relationship diagrams - including the “Crows feet” syntax
- Understand generic database concepts: one-to-many, many-to-many, one-to-one, etc.
- Understand Rails model concepts: `belongs_to`, `has_many`
- Don't worry about: `has-and-belongs-to-many`, `has_one`, or join tables

Data Modeling

- Understand the difference between primary key, logical key, and foreign key
- Understand foreign keys conceptually and how they are expressed in Rails migrations and Rails Models
- Understand the Rails approach to primary keys - understand auto-increment

Data Modeling

- Understand how to write Rails code to traverse a belongs_to relationship - “Given a comment - how do you find the user’s login name?”
- chat.member.name - what does this do (Assignment 10)
- Understand the purpose of the :include option on find - hint to pre-load the related elements in a single SQL query if possible

Testing

- No testing code to write - may have to explain some test code
- What is the purpose of testing? How does testing fit into the development cycle?
- What is model unit test?
- What is a functional controller test?

Written Final Summary

- A lot of material to cover - Diverse topics
- Breadth not depth - Make sure to skim through all the slides
- Famous last words: My intent is that the questions are straightforward and detect if you have a basic understanding of things

Programming Final

- April 15, 4-6PM DIAD Lab / 311 West Hall
- Two Hours - 30% off beyond 2 hours 50% off beyond 2.5 hours
- Open Book, Open Notes, Open Network
- Can use/adapt old assignments
- You must not get help from another person

Programming Final

- Three or four screens
- One table - no relationships
- There will be no Ajax
- There will be no CSS
- There will be no Unit Testing

Programming Final

- Must achieve the specifications exactly
 - No more
 - No less
 - Don't use scaffolding
- Study: Review programs - redo the midterm under time pressure to test your coding skills